IN THE CLAIMS

Please amend the claims as follows:

Claims 1-9 (Canceled).

Claim 10 (Currently Amended) ~~Encapsulated~~ An encapsulated spark gap arrangement for use in power supply systems, ~~in particular~~ including low-voltage systems, having an ~~and~~ optimized ability to extinguish system secondary currents, said encapsulated spark gap arrangement comprising:

an arcing chamber having a spark gap and at least two electrodes between ~~as well as with an arcing chamber, within~~ which arcing occurs ~~between two electrodes in the spark gap;~~ and [[,]]

an intermediate constant-volume chamber disposed ~~wherein~~ downstream of the arcing chamber and connected thereto by a metallic flow channel, wherein ~~there is disposed an intermediate chamber~~ a volume of ~~which~~ said intermediate chamber is substantially larger than a volume of the arcing chamber ~~itself, and wherein there is further provided a pressure-resistant, preferably metallic flow channel to connect the arcing chamber to the intermediate chamber~~.

Claim 11 (Currently Amended) ~~Encapsulated~~ The encapsulated spark gap arrangement according to Claim 10, wherein a ratio of a ~~the~~ volume of ~~the~~ a high-pressure region, including ~~an~~ said arcing chamber and ~~a~~ said flow channel, ~~is related to the~~ to a volume of ~~the~~ a low-pressure region, including said ~~of the~~ intermediate chamber and said outlet opening, ~~as~~ is approximately 1:10, and a ratio between the volumes of the arcing chamber and the intermediate chamber is 1:40.

Claim 12 (Currently Amended) ~~Encapsulated~~ The encapsulated spark gap arrangement according to Claim 10,

wherein the intermediate chamber on its inner surface comprises metallic walls or is coated with metal layers.

Claim 13 (Currently Amended) An encapsulated spark gap arrangement for use in power supply systems, including low-voltage systems, having an optimized ability to extinguish system secondary currents, said encapsulated spark gap comprising:

an arcing chamber, within which arcing occurs between two electrodes in the spark gap, wherein downstream of the arcing chamber there is disposed an intermediate chamber, a volume of which is substantially larger than a volume of the arcing chamber itself, and wherein there is further provided a pressure-resistant, preferably metallic flow channel to connect the arcing chamber to the intermediate chamber, and

~~Encapsulated spark gap arrangement according to claim 10,~~

~~wherein~~ the walls of the intermediate chamber are covered on their inner surfaces with a plastic that gives off a quenching gas when heated.

Claim 14 (Currently Amended) ~~Encapsulated~~ The encapsulated spark gap arrangement according to Claim 13, wherein the intermediate chamber comprises means of additional elimination of heat.

Claim 15 (Currently Amended) ~~Encapsulated~~ The encapsulated spark gap arrangement according to Claim 14, wherein metallic cooling surfaces or cooling ribs are used as the means of additional elimination of heat.

Claim 16 (Currently Amended) ~~Encapsulated~~ The encapsulated spark gap arrangement according to claim 10,

wherein the flow channel is nozzle-shaped and has a smaller diameter than the intermediate chamber.

Claim 17 (Currently Amended) ~~Encapsulated~~ The encapsulated spark gap arrangement according to claim 10,

wherein the volume of the intermediate chamber is made large enough that an entire amount of gas produced by ignition in the arcing chamber is retained therein.

Claim 18 (Currently Amended) An encapsulated spark gap arrangement for use in power supply systems, including low-voltage systems, having an optimized ability to extinguish system secondary currents, said encapsulated spark gap comprising:

an arcing chamber, within which arcing occurs between two electrodes in the spark gap, wherein downstream of the arcing chamber there is disposed an intermediate chamber, a volume of which is substantially larger than a volume of the arcing chamber itself, and wherein there is further provided a pressure-resistant, preferably metallic flow channel to connect the arcing chamber to the intermediate chamber, and

~~Encapsulated spark gap arrangement according to claim 10,~~

~~wherein~~ a flow channel projects into the intermediate chamber and guide means are provided therein to divert the gas flow.

Claim 19 (New) An encapsulated spark gap arrangement for use in power supply systems, including low-voltage systems, having an optimized ability to extinguish system secondary currents, said encapsulated spark gap arrangement comprising:

an arcing chamber having a spark gap and at least two electrodes between which arcing occurs; and

an intermediate chamber having a continuously opened outlet opening, said intermediate chamber being disposed downstream of the arcing chamber and connected thereto by a metallic flow channel, wherein a volume of said intermediate chamber is substantially larger than a volume of the arcing chamber.

Claim 20 (New) The encapsulated spark gap arrangement of claim 19, wherein said intermediate chamber further comprises a flexible membrane.

Claim 21 (New) The encapsulated spark gap arrangement of claim 20, wherein said intermediate chamber further comprises a switch configured to be closed by a movement of said flexible membrane when the pressure inside said intermediate chamber reaches a limiting value.

Claim 22 (New) The encapsulated spark gap arrangement of claim 10, wherein said intermediate chamber further comprises an outlet opening.

Claim 23 (New) The encapsulated spark gap arrangement of claim 22, wherein said intermediate chamber further comprises a valve at said outlet opening, wherein said valve opens when the pressure inside said intermediate chamber reaches a limiting value.